Int. J. Nonlinear Anal. Appl. 13 (2022) 1, 4069-4083

ISSN: 2008-6822 (electronic)

http://dx.doi.org/10.22075/ijnaa.2022.6274



Modeling causal and interfering conditions in corruption from auditing perspective using Grounded theory

Ali Nikoueia, Ali Mohammadia,*, Ali Bayata

^aDepartment of Accounting, Zanjan Branch, Islamic Azad University, Zanjan, Iran

(Communicated by Ehsan Kozegar)

Abstract

This study aimed to identify and model the causal and interfering conditions against corruption by auditing firms. This research is applied objectively and it is among the studies with mixed methods. In the qualitative section, interviews were used to collect data and concepts and categories were identified using Grounded theory. In the qualitative section, the required information was collected using a researcher-made questionnaire. The statistical sample of the research consisted of 15 people in the qualitative section who were selected by snowball sampling method and 302 senior students and PhD students in accounting and auditing were selected in the quantitative section by random sampling method. SPSS24 and LISSREL software were used for data analysis. Based on the results of the qualitative section, the interferer conditions include the disadvantages of information disclosure (4 concepts), special organizational considerations (2 concepts) and political failure (3 concepts) and six categories of essential information (5 concepts), participation (3 concepts), accountability (2 concepts), secrecy (4 concepts), corruption (2 concepts) and social responsibility (3 concepts) were identified as causal conditions of corruption in this study. The results of confirmatory factor analysis in the quantitative section confirmed the results obtained in the qualitative section.

Keywords: Corruption, Interfering conditions, Audit, Modeling, Grounded theory

2020 MSC: 68T09

Email addresses: ali_nikouei@yahoo.com (Ali Nikouei), ali_mohammadi93@yahoo.com (Ali Mohammadi), ali.bayat22@yahoo.com (Ali Bayat)

Received: November 2021 Accepted: January 2022

^{*}Corresponding author

1. Introduction

Accountants and auditors can play an important role in preventing fraud and financial corruption. In other words, fraud and corruption can be detected by various sources such as internal or independent auditors, statutory accountants, employees, vendors and others [11]. Independent auditing is used as a monitoring mechanism to investigate the accuracy and correctness of financial information and to prevent financial embezzlement, and in particular, independent auditing can also be used to detect financial irregularities [4]. Various factors such as cultural, historical, geographical, economic, and governmental issues have been considered as variables causing corruption, so far [19]. These studies have shown that the high power distance in a country or organization, the existence of a large organizational hierarchy, and the fact that the managers adopt a command or participatory management method, lead to the spread of corruption [10]. In addition, the rate of corruption varies from country to country. For example, in a complex transition from a traditionally poor country to a rich liberal-democratic country, corruption is greatly reduced. This reduction in corruption does not occur at a specific point in the transition period, but it is achieved gradually [17]. Considering the government factor, it can be argued that the larger government may contribute to corruption through more bureaucracy, paperwork, creating opportunities for corrupt practices [8]. Economically, many researchers have announced that the level or stage of economic development, determined by per capita income, is also associated with corruption. A richer country has the ability to allocate more resources to detect and prevent corruption. Moreover, increasing education and literacy resulting from development increases the likelihood that corruption will be detected and punished [6].

One of the challenges of societies is crimes with financial and economic nature, especially in developing countries; the development of new technologies such as information technology has greatly affected the scope of these crimes. Financial crimes are linked to a chain of other crimes; Crimes such as bribery, money laundering, falsification of customs or tax returns and in an organized manner, disrupting the economic system, each of which has a great power to destroy national interests and social capitals. House money, economic imbalances, capital flight, as well as disrupting the plans of managers and officials to control the health and safety of society and other such things, are the common aspect of all financial crimes. Part of the occurrence of financial crimes in any country is due to instability in the economic situation of that country. Economic instability is an undesirable phenomenon and its existence has economic and social costs for society. Increasing economic instability disrupts the structure and economic security of the country, and as a result, the costs to people's lives lead to a decrease in the welfare of households.

Financial and economic crimes have a significant negative impact on the economic, social and political stability of a country at the macro level, and increase business costs, prevent foreign and domestic investment, reduce public confidence in the government, increase poverty and unemployment, accumulate financial and economic power of criminals and, consequently, weaken the national economy and democratic systems [2]. Usually, when we talk about economic crime, we focus immediately on financial and organized crimes, while all financial crimes are not economic crimes, although in most cases, the results and consequences of financial crimes and economic crimes are the same. In addition, sometimes a criminal act may be both a financial crime and an economic crime [21].

In order to identify and estimate the risks of distortion due to fraud or error in the financial statements and to design and implement the necessary audit procedures, the auditor should acquire sufficient knowledge of the entity and its environment, including internal controls [11]. The description provided in standard 240 of auditing clarifies the various aspects of auditors' responsibilities in the area of fraud, wrong markers and fraud, the responsibility of the board of directors and management in establishing internal control systems, and the auditors' responsibility in financial reporting.

Supervision and auditing guidelines are complex monitoring procedures that can provide management with important information to prevent, detect, and respond to fraud and misuse; In addition, these activities are a major tool for the organization in measuring the performance of the control environment.

Statutory auditing is also a new area of auditing whose sole purpose is to detect fraud inside and outside the organization. Statutory audit is the application of financial accounting and investigative skills in a standard acceptable limit by the court to deal with disputes in civil and criminal litigation [18]. According to Article 14 of the Law on Promoting the Health of the Administrative System and Combating Corruption, approved by the Islamic Consultative Assembly of Iran in 2008, inspectors, official experts, auditors and accountants, auditors, accountants, supervisors and other persons responsible for registering or reviewing documents, offices and activities of real and legal individuals are in the scope of duties, are obliged to notify any corruption, subject of Article 5 of the mentioned law, to the competent regulatory or judicial authorities. Based on the above, the purpose of this study is to model the interferer's conditions in auditors' fight against corruption.

2. Research background

Mansouri et al. in a study entitled "Social contexts of economic and administrative corruption (a study of regional municipalities and banks in Tehran" using the technique of thematic analysis obtained 5 main themes that are recognized as the most important social contexts of economic and administrative corruption, included religious and moral adherence, institutional trust, civil liberties, kinship and administrative corruption, and the ugliness of corruption in the society. According to the themes obtained from the research findings, it can be said that religious and moral non-adherence in individuals when there is a lack of work conscience and professional ethics, institutional mistrust with reducing job satisfaction, organizational commitment, reducing confidence and job diversion, lack of transparency and free flow of information due to lack of civil liberties, the existence of administrative kinship system with the creation of illegal activities such as embezzlement, favoritism, sale of confidential information of the organization and the like, non-ugliness of corruption by converting it into a value in society can be the basis for the spread of economic and administrative corruption [15].

Mahmoudi et al. in an article entitled "Exploring the underlying and interfering factors of corruption in the Iranian football industry" identified immorality, non-commitment, lack of interaction and organizational synergy and lack of legal environment as a key category. Findings related to contextual factors represent 25 sub-categories of axial coding in 7 general concepts from selective coding such as gaps in law, financial incentives, improper functioning of media, weakening decision-making bodies, weak transfer laws, lack of behavioral criteria and non-transparency of processes. The findings of the interfering (influential) factors were also classified into 7 sub-categories resulting from axial coding in 3 general concepts of selective coding of overlapping tasks, lack of anti-corruption will and lack of coordination. In general, identifying the underlying and influential factors of corruption can help officials in preventing corruption and improving the organizational health of football [14].

Abbaszadeh Vaqefi et al. conducted a study entitled "Identifying indigenous causes of administrative corruption: A Case Study of Tehran Municipality". After analyzing the interviews using content analysis and code extraction, questionnaire design indicators were identified as the causes of corruption. In the second stage, which was a quantitative stage of the research, a researcher-made questionnaire was distributed and collected among 300 employees and managers of Tehran Municipality. Quantitative data were analyzed using statistical tests including one-sample test and Friedman rank test. The results showed that according to the statistical sample, all the factors extracted from

the qualitative stage are known as effective causes of corruption in Tehran Municipality. In ranking the causes of administrative corruption in Tehran Municipality, the results showed that there are three organizational, personal and environmental factors affecting the incidence of corruption; Individual factors are the first priority, organizational factors are the second priority and environmental factors are the third priority [1].

Karimipour and Mahdavi in an article entitled "Identifying the factors affecting the financial corruption of government employees from the perspective of auditors of the Court of Accounts of Fars and Kerman provinces" stated that financial corruption has extensive destructive economic, cultural and social consequences. The most important step to deal with this destructive phenomenon is to identify the factors and motives for its occurrence. In this regard, the purpose of this study is to identify the effective factors on the financial corruption of government employees from the perspective of auditors of the Court of Accounts of Fars and Kerman provinces. For this purpose, 26 variables were selected by reviewing the existing background and literature, as well as considering the environmental and economic conditions of the country and were approved by experts. Exploratory factor analysis was used to identify the effective factors on the level of corruption and independent t-test was used to examine the differences between the views of the two respondent groups. The results of factor analysis indicate that the seven effective factors on corruption are: inefficiency of the education system and weakening of moral values, weak administrative structure, weak control systems, weak economic system, inefficient governance system, regulatory weaknesses and lack of meritocracy. The most important effective factors on the level of financial corruption, inefficiency of the education system and the weakening of moral values and the lack of necessary education variable, had the greatest effect on this factor [12].

Hasas Yeganeh et al. in an article entitled "Study of the relationship between the supervisory role of auditors and promoting the health of the administrative system" showed that there is a direct relationship between the variables of auditors' monitoring (ethics and etiquette of accountants, planning, monitoring on internal controls and monitoring on internal audits) and variable of administrative health (legal posivitism, accountability, transparency, health and integrity) [9].

Zare Bahmaniri and Malekian Kalebasti in a study entitled "Ranking the effective factors on the likelihood of financial fraud according to the audit report of financial statements" have ranked the effective factors on the likelihood of financial fraud according to the audit report of financial statements. In this regard, using content analysis and expert opinion, the clauses of the audit report 181 of exchange companies for 9 years (2006 to 2014) were reviewed and classified, which finally a pairwise comparison questionnaire completed by experts has been analyzed using the fuzzy analytic hierarchy process (AHP). The results showed that the clauses related to high-loss income and assets have the highest priority in the effective factors on the likelihood of financial fraud according to the audit report of the financial statements [22].

Diment and Tosato in a study to identify the causes and consequences of corruption by reviewing studies conducted in the last decade analyzed the existing knowledge of the causes of corruption. Some of their results are: 1. larger size of the government leads the higher level of corruption. 2. Higher levels of adherence to religious beliefs lead to lower levels of corruption. 3. Higher levels of transparency lead to lower levels of corruption [5].

Elam et al. in an article titled corruption and tax evasion, examine the role of corruption in reducing economic growth. The results of their research show that the tax evasion of economic enterprises increases by the increase in corruption, and thus leads to the reduction of the government budget and consequently the reduction of the production of the whole economy [3]. Loridson et al. examined factors influencing crime rates in 15 EU countries. The results of this study indicate that inflation, unemployment and urban population have increased crime rates and on the other hand,

economic growth and education have reduced crime rate [13].

Nanli et al. in a study examined the economic conditions of crimes based on inflation, unemployment and growth rate of stock market from 1948 to 2009 on various types of theft. The significant point in this study is that although significant coefficients have been found for all three variables used, the inflation rate in addition to the period under study will also have social effects in later periods. In other words, its long-term effects have also been confirmed [16].

Tamayo et al. conducted a study on the effect of inflation on the occurrence of financial crimes, the results of which showed that crime increases when inflation is high [20]. Gibby (2012) considers the causes of corruption economic, institutional, political and social. In the economic field, factors such as financial considerations and low wages, in the institutional field of monopoly and the power to exercise widespread opinion by government officials, poor accountability, lack of efficient and effective law enforcement, lack of institutional mechanisms to deal with corruption, weak civil society and the lack of media freedom, in the political field, factors such as the structure and functions of political institutions, the acquisition and application of political power, and in the social field, the attitudes and actions of society can be considered as causes of corruption [7].

3. Research method

The present study is a qualitative research. In this research, data is summarized and analyzed using grounded theory. Grounded theorizing is a research approach that helps to formulate new theories based on real data and through scientific method. This approach has been proposed by Glaser and Strauss and its aim is to strengthen qualitative studies and provide solutions to reduce the common quantification in the social sciences. Induction is the main focus of grounded theory. In this approach, qualitative analysis is considered prior to quantitative analysis and the production of theory is considered prior to the test. This method provides the opportunity to study complex phenomena that cannot be investigated by quantitative models. In grounded theory, information is extracted from texts and information is analyzed, and finally model and theory are extracted in three main steps (open coding, axial coding, and selective coding). Steps of conducting research in the field of grounded theory include research questions, data collection, data coding in three stages, open coding, axial coding, selective coding, writing analytical notes, recording ideas and interpreting data, writing and formulating theory. The statistical population of the present study in the qualitative part included 15 experts and it is included 302 doctoral and master students in accounting and auditing in the quantitative part. In order to analyze the data, SPSS and LISREL software were used.

4. Research findings

4.1. Findings of qualitative section

In the present study, the interfering conditions have been considered as conditions that with the underlying factors can affect the anti-corruption strategies by audit firms. Based on the results of this section and as shown in the table, these conditions include the disadvantages of information disclosure (4 concepts), specific organizational considerations (2 concepts) and political inadequacies (3 concepts). Causal conditions: These conditions cause a pivotal phenomenon. Based on the find-

Table 1:	Concepts and sub-categories related to the main category of interfering conditions affecting the fight against
corruptio	n by auditing firms

	by address simb	~	
Line	sub-categories	Concepts	Frequency of repeti-
			tion
1	Disadvantages of information	Social pessimism	11
	disclosure		
2		Lack of transparency of man-	10
		agers	
3		Psychological disorder	8
4		Inability to analyze	11
5	Special organizational consid-	Not retelling information	14
	erations		
6		Security considerations	15
7	Political failures	Lack of decisive action against	15
		violators	
8		consolidation of organiza-	10
		tional position	
9		Information rente	14

ings of the interviews, six categories of essential information (5 concepts), participation (3 concepts), accountability (2 concepts), secrecy (4 concepts), corruption (2 concepts) and social responsibility (3 concepts) were identified as causal conditions of corruption in this study.

4.2. Findings of quantitative section

4.2.1. Confirmatory factor analysis of the concepts and sub-categories of interfering conditions in the fight against corruption

Analysis of the qualitative part of the research showed that the interfering conditions in the fight against corruption consist of 3 sub-categories and 9 concepts, in order to examine and confirm the relationship between each of them, confirmatory factor analysis was used.

4.2.1.1 Evaluating the whole model

Based on the Chi-square /degree of freedom index obtained for this model equal to 1.69 and comparing it with the acceptable limit which is less than 3, the model has a good fit. The result obtained from the other studied indices, i.e, the root mean square error of approximation (RMSEA), root mean square residual (RMR), comparative fit index (CFI), normal soft index (NFI), non-normal fit index (NNFI), Incremental fit index (IFI), goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) which are equal to 0.025, 0.044, 0.85, 0.83, 0.95, 0.82, 0.87 and 0.93 indicate the proper fit of the model.

Table 2: Concepts and sub-categories related to the main category of causal conditions of corruption

Line	sub-categories	Concepts	Frequency of repeti-
			tion
1	Essential information	Providing information needs	7
2		Notifications	9
3		Awareness of required information	11
4		Awareness of stakeholders	12
5		Lack of information and notifications	14
6	Participation	Stakeholder participation	10
7		Shareholder participation	8
8		Participation of employees of auditing	14
		companies	
9	Accountability	Accountability for duties and responsi-	13
		bilities	
10		Accountability of auditing companies in	15
		the field of anti-corruption measures	
11	Secrecy	Secrecy because of avoiding negative	14
		consequences	
12		Impossibility to hide information	8
13		Managers' secrecy	12
14		Charged with secrecy of audit firms	11
15	Corruption	Formation of administrative corruption	13
16		Information corruption	15
17	Social responsibility	Various social responsibilities	7
18		Social duties	9
19		The social role of auditing firms	10

Table 3: Fitness indicators of the sub-category measurement model of interfering conditions in the fight against corruption

Statistic	desired limit of statistics	Statistic
Chi-square /degree of freedom	≤ 3	1.69
root mean square error of approximation	≤ 0.08	0.025
(RMSEA)		
root mean square residual (RMR)	≤ 0.08	0.044
goodness of fit index (GFI)	≥ 0.85	0.85
adjusted goodness of fit index (AGFI)	≥ 0.80	0.83
comparative fit index (CFI)	≥ 0.90	0.95
normal soft index (NFI)	≥ 0.80	0.82
non-normal fit index (NNFI)	≥ 0.80	0.87
Incremental fit index (IFI)	≥ 0.90	0.93

4.2.1.2. Confirmatory factor analysis of sub-categories of causal conditions of corruption

In order to confirm the concepts that have been used to measure the sub-categories of causal conditions, confirmatory factor analysis was used, the results of which are examined in two sections.

4.2.1.3. Evaluating the whole model

Based on the Chi-square /degree of freedom index obtained for this model equal to 3.82 and comparing it with the acceptable limit which is less than 3, the model doesn't have a good fit. The result obtained from the other studied indices, i.e, the root mean square error of approximation (RMSEA), root mean square residual (RMR), comparative fit index (CFI), normal soft index (NFI), non-normal fit index (NNFI), Incremental fit index (IFI), goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) which are equal to 0.065, 0.031, 0.90, 0.86, 0.95, 0.84, 0.84 and 0.89 indicate the proper fit of the model.

TD 11 4 TO:	. 1			1 1 C	1 1	c . ·
Lable 4: Fitness	s indicators of	the sub-category	measurement	model of caus	al conditions	of corruption

Statistic	desired limit of statistics	Statistic
Chi-square /degree of freedom	≤ 3	3.82
root mean square error of approximation (RMSEA)	≤ 0.08	0.065
root mean square residual (RMR)	≤ 0.08	0.031
goodness of fit index (GFI)	≥ 0.85	0.90
adjusted goodness of fit index (AGFI)	≥ 0.80	0.86
comparative fit index (CFI)	≥ 0.90	0.95
normal soft index (NFI)	≥ 0.80	0.84
non-normal fit index (NNFI)	≥ 0.80	0.84
Incremental fit index (IFI)	≥ 0.90	0.89

4.2.1.4. Evaluating the measurement part of the model

Based on the results of confirmatory factor analysis test for all 9 concepts in the model, the factor load value was more than 0.4 and the t-statistic was higher than 2.54. As a result, all of these concepts were correlated with the sub-categories in the research model at the level of one percent. According to the results of confirmatory factor analysis, presented in the following figures, it can be stated that in the model of interfering conditions in the fight against corruption by auditing firms taken from the research results; subcategories include the disadvantages of disclosing information consisting of four concepts, specific organizational considerations consisting of two concepts, and political failures consisting of three concepts.

Table 5: Symbol, factor load and t-statistic related to the concepts of interfering conditions in the fight against corruption in the research model

Concepts	Symbol	Load factor	t statistic
Social pessimism	Disclo1	0.88	4.92
Lack of transparency of managers	Disclo2	0.89	4.37
Psychological disorder	Disclo3	0.99	5.68
Inability to analyze	Disclo4	0.83	3.89
Not retelling information	Speorg1	0.81	3.58
Security considerations	Speorg2	0.72	3.79
Lack of decisive action against violators	Polfail1	0.93	4.91
Organizational position consolidation	Polfail2	0.87	4.20
Information rente	Polfail3	0.77	3.27

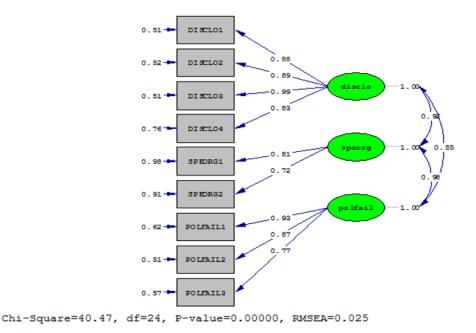


Figure 1: Causal relationships between concepts and sub-categories of interfering conditions in the fight against corruption by displaying factor loads

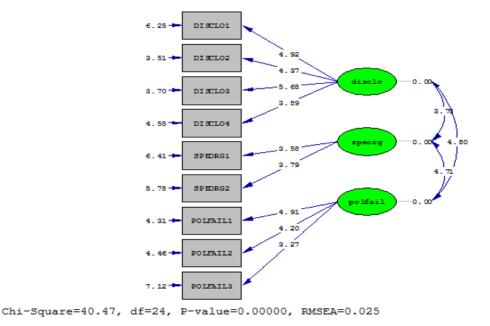


Figure 2: Causal relationships between concepts and sub-categories of interfering conditions in the fight against corruption by displaying t-statistics

4.2.2. Confirmatory factor analysis of main category of interfering conditions in fight against corruption

To measure the main category of interfering conditions in the fight against corruption, according to the results of the qualitative part of the research, a model consisting of 3 sub-categories was designed and to evaluate the validity of the model in the research, confirmatory factor analysis was used.

4.2.2.1. Evaluating the whole model

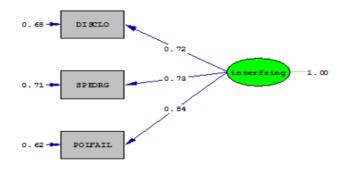
Chi-square /degree of freedom index is obtained 5.98 for this model and it is sgnificant at 1% level, showing the model doesn't have a good fit. The result obtained from the other studied indices, i.e, the root mean square error of approximation (RMSEA), root mean square residual (RMR), comparative fit index (CFI), normal soft index (NFI), non-normal fit index (NNFI), Incremental fit index (IFI), goodness of fit index (GFI) and adjusted goodness of fit index (AGFI) which are equal to 0.061, 0.034, 0.98, 0.87, 0.86, 0.90, 0.90 and 0.86 indicate the proper fit of the model.

able 6: Fitness indicators of the main category measurement mo	odel of interfering conditions in fight aga	ainst corruptic
Statistic	desired limit of statistics	Statistic
Chi-square /degree of freedom	≤ 3	5.98
root mean square error of approximation (RM-	≤ 0.08	0.061
SEA)		
root mean square residual (RMR)	≤ 0.08	0.034
goodness of fit index (GFI)	≥ 0.85	0.90
adjusted goodness of fit index (AGFI)	≥ 0.80	0.86
comparative fit index (CFI)	≥ 0.90	0.98
normal soft index (NFI)	≥ 0.80	0.87
non-normal fit index (NNFI)	≥ 0.80	0.86
Incremental fit index (IFI)	≥ 0.90	0.90

tion

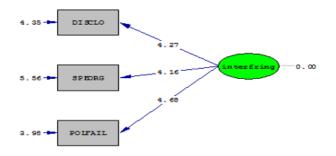
4.2.2.2. Evaluating the measurement part of the model

Based on the results of confirmatory factor analysis test for all sub-categories, the factor load value was more than 0.4 and the t-statistic was higher than 2.54. As a result, all of these concepts were correlated with the main category in the research model at the level of one percent. According to the results, it can be stated that in the fight against corruption, interfering conditions consisted of 3 subcategories of the disadvantages of disclosing information, specific organizational considerations and political failure.



Chi-Square=11.96, df=2, P-value=0.00000, RMSEA=0.061

Figure 3: Causal relationships between the main category and sub-categories of interfering conditions in the fight against corruption by displaying factor loads



Chi-Square=11.96, df=2, P-value=0.00000, RMSEA=0.061

Figure 4: Causal relationships between the main and sub-categories of interfering conditions in the fight against corruption by displaying t-statistics

Table 7: Symbol, factor load and t-statistic related to the sub-categories of interfering conditions in the fight against corruption in the research model

Sub-categories	Symbol	Load factor	t statistic
Disadvantages of information disclosure	Disclo1	0.72	4.27
Special organizational considerations	Speorg	0.73	4.16
Political failures	polfail	0.84	4.68

4.2.2.3. Evaluating the measurement part of the model

Based on the results of confirmatory factor analysis test for all 9 concepts in the model, the factor load value was more than 0.4 and the t-statistic was higher than 2.54. As a result, all of these concepts were correlated with the sub-categories in the research model at the level of one percent. According to the results of confirmatory factor analysis, which is presented in the following figures, it can be stated that in the model of interfering conditions in the fight against corruption by auditing firms taken from the research results; subcategories include the disadvantages of disclosing information consisting of four concepts, specific organizational considerations consisting of two concepts, and political failures consisting of three concepts.

Table 8: Symbol, factor load and t-statistic related to the concepts of interfering conditions in the fight against corruption in the research model

Concepts	Symbol	Load factor	t statistic
Social pessimism	Disclo1	0.88	4.92
Lack of transparency of managers	Disclo2	0.89	4.37
Psychological disorder	Disclo3	0.99	5.68
Inability to analyze	Disclo4	0.83	3.89
Not retelling information	Speorg1	0.81	3.58
Security considerations	Speorg2	0.72	3.79
Lack of decisive action against violators	Polfail1	0.93	4.91
Organizational position consolidation	Polfail2	0.87	4.20
Information rente	Polfail3	0.77	3.27

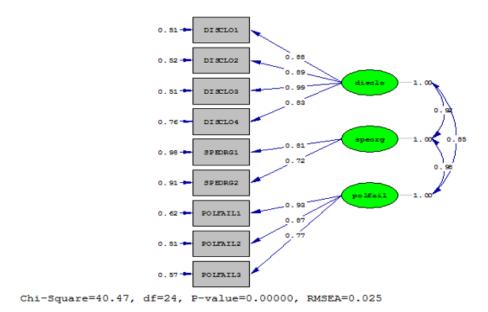


Figure 5: Causal relationships between concepts and sub-categories of interfering conditions in the fight against corruption by showing factor loads

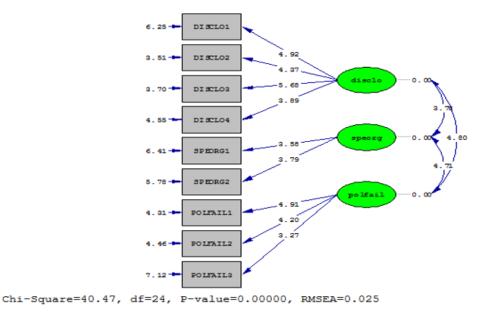


Figure 6: Causal relationships between concepts and sub-categories of interfering conditions in the fight against corruption by displaying t-statistics

4.2.3. Descriptive statistics of the main and sub-categories of interfering conditions in the fight against corruption

Based on the research results of descriptive statistics, the sub-categories and main categories of interfere in the fight against corruption by auditing firms from the respondents' point of view; including range of changes, minimum, maximum, mean, standard deviation and variance for each of the components are presented in the table.

Table 9. Descriptive statistics of the main and sub-categories of interfering conditions in the light against corruption							
Variable	Number	Range of variation	Minimum	maximum	mean	SD	Variance
Disadvantages of in-	302	16	4	20	13.74	3.99	15.90
formation disclosure							
Special organiza-	302	8	2	10	7.19	2.08	4.31
tional considera-							
tions							
Political failure	302	12	3	15	10.60	3.35	11.21
Interfering condi-	302	32	12	44	31.53	8.59	73.87
tions							

Table 9: Descriptive statistics of the main and sub-categories of interfering conditions in the fight against corruption

4.2.4. Prioritizing sub-categories of interfering conditions in fight against corruption

The results showed that according to the respondents, among the sub-categories of interfering conditions in the fight against corruption, disadvantages of information disclosure, special organizational considerations and political failures, respectively, had higher priorities.

Table 10: Descriptive statistics of the main and sub-categories of interfering conditions in the fight against corruption

Variable	Mean	SD	Variation coefficient	Priority
Disadvantages of information disclosure	13.74	3.99	0.29	1
Special organizational considerations	7.19	2.08	0.29	1
Political failure	10.60	3.35	0.32	3

4.2.5. Descriptive statistics of main and sub-categories of causal conditions of corruption

Based on the results of descriptive statistics of main and sub-categories of causal conditions from the point of view of the respondents; range of changes, minimum, maximum, mean, standard deviation and variance for each of the components are presented in the table.

Table 11: Descriptive statistics of main and sub-categories of causal conditions of corruption

Variable	Number	Range of variation	Minimum	maximum	mean	SD	Variance
Essential informa-	302	13	10	23	17.70	2.11	4.46
tion							
participation	302	8	5	13	9.13	1.75	2.07
Accountability	302	5	5	10	7.43	1.16	1.34
Secrecy	302	9	8	17	11.61	2.24	5.01
Corruption	302	7	3	10	7.02	1.40	3.96
social responsibility	302	7	8	15	11.49	1.32	1.73
Causal conditions	302	22	53	75	64.38	4.57	20.86

5. Conclusions and suggestions

Among the sub-categories of the causal conditions of corruption; the categories of social responsibility, essential information and accountability had first to third priorities.

The existence of conditions that originate outside the framework, along with the underlying conditions, affect anti-corruption strategies. Based on the findings of the study, political failure such

as indecisiveness in dealing with violators, the importance of maintaining the position of managers, the existence of information rentes of certain individuals, special considerations that prevent some information, especially in security issues and inability to analyze information by the public and creating a psychological burden of information expression in society, are an obstacle to the fight against corruption in organizations. Based on research results:

One of the most important causes of financial crimes is employment issues such as unemployment. Unemployed people, because they do not have a certain income, may commit financial crimes to meet their needs, while having a minimum income may prevent them from committing such crimes. Income restrictions such as unfair distribution of income are another effective factor on the occurrence of financial crimes that increase the class gap in society. The very significant difference in the share of the upper and lower income deciles of total income in a society can indicate the depth of the gap between the different classes.

One of the most important causes of financial crimes is employment issues such as unemployment. Unemployed people, because they do not have a certain income, may commit financial crimes to meet their needs, while having a minimum income may prevent them from committing such crimes. Income restrictions such as unfair distribution of income are another effective factor on the occurrence of financial crimes that increase the class gap in society. The very significant difference in the share of the upper and lower income deciles of total income in a society can indicate the depth of the gap between the different classes.

Another effective factor on the occurrence of crime and its increase is the inefficient monitoring system, so that the incompatibility of punishment with the crime or the lack of monitoring on law enforcement reduces the efficiency of the monitoring system. Accordingly, if the efficiency of this system increases, the cost of committing financial crimes will increase and the probability of its occurrence will decrease. Lack of transparency in laws coping with financial crimes can also affect the occurrence of such crimes, so that many financial criminals hide the source of their illegal income and give it legal status. These criminals may also be able to easily use the money resulting from the results of their activities in the legal sector so that even if they are arrested, part of the profits gained from their criminal activities will remain legitimate.

References

- [1] Sh. Abbaszadeh Vaqefi, J. Delkhah and L. Forouzandeh Dehkordi, *Identifying indigenous causes of corruption: a case study of Tehran municipality*, Audit. Knowledge 17(68) (2017) 5–45.
- [2] T. Akinbo, *Understanding Economic and Financial Crimes*, Presentation to the EFCC/NYSC Integrity Club (Nigeria), March 14, 2009.
- [3] J. Alm, J. Martinez-Vazquez and C. McClellan, Corruption and firm tax evasion, J. Econ. Behav. Organ. 124 (2016) 146–163.
- [4] M. Aslani, F. Lotfaliyan, V. Shafieipour and M. Ghasemi. *The role of auditing profession in fighting against economic and financial crimes*, Int. Conf. E-bus. Manag. Econ. IPEDR Vol. 25, 2011.
- [5] E. Dimant and G. Tosato, Causes and effects of corruption: what has past decades empirical research taught? a survey, J. Econ. Surveys 32(2) (2017) 1–22.
- [6] N.G. Elbahnasawy and C.F. Revier, *The determinants of corruption: cross-country-panel-data analysis*, Dev. Econ. 50(4) (2012) 311–333.
- [7] B. Gebeye, Corruption and human rights: exploring the relationships, Human Rights Human welfare 70 (2012).
- [8] R.K. Goel and M.A. Nelson, Causes of corruption: history, geography and government, J. Policy Model. 32(4) (2010) 433–447.
- [9] Y. Hasas Yeganeh, M. Zahir and Z. Ghaffari, Investigating the relationship between the supervisory role of auditors and promoting the health of the administrative system, Manag. Account. Audit. Knowledge 5(18) (2016) 83–93.
- [10] W.D. Huber, Culture and Corruption: Using Hofstede's Cultural Dimensions to Explain Perceptions of Corruption, Retrieved from SSRN: https://ssrn.com/abstract=2383486.

- [11] IFAC. The accountancy profession: fighting fraud and corruption, press release, 2016a, available at: http://www.ifac.org/publications-resources/accountancy-profession-fighting-fraud-and-corruption Accessed 18.11.16.
- [12] I. Karimipour and G.H. Mahdavi, Identifying the factors affecting the financial corruption of government employees from the perspective of auditors of the Court of Accounts of Fars and Kerman provinces, J. Public Account. 4(1) (2017) 73–86.
- [13] J.T. Lauridsen, F. Zeren and A. Ari, A Spatial Panel Data Analysis of Crime Rates in EU, Department of Business and Economics, University of Southern Denmark, 2013.
- [14] A. Mahmoudi, H. Henry, J. Younesi and J. Shahlaei Bagheri, Exploring the underlying and intervening factors of corruption in the Iranian football industry, J. Sports Manag. 10(4) (2018).
- [15] F. Mansouri, M. Hosseini Qomi and H. Maslahati, Social contexts of economic and administrative corruption (study on regional municipalities and banks in Tehran), Social Issues of Iran 9(1) (2018) 101–123.
- [16] J.M. Nunley, R. Seals and J. Zietz, *The impact of macro economic condition on property crime*, Aubum Univ. Dep. Econ. Work. Paper Ser. (2013) 2–15.
- [17] M. Paldam, The cross-country pattern of corruption: economics, culture and the seesaw dynamics, Eur. J. Polit. Econ. 18(2) (2002) 215–240.
- [18] D. Shamki, Internal audit responsibility in auditing financial system fraud, Bus. e-Bull. 1(1) (2009) 25–32.
- [19] G.R. Taleghani and M. Mohammadi, Comparative management: international attitude, Tehran, Science and Literature, 2011.
- [20] A.M. Tamayo, C. Chavez and N. Nabe, Crime and inflation rates in the philippines: a co-integration analysis, Int. J. Econ. Finance Manag. 2(5) (2013) 380–385.
- [21] M. Thiankolu, The Anti-Corruption And Economic Crimes Act, 2003; Has Kenya Discharged her Obligations to HerPeoples and the World? LL.B. (Hons.) Nairobi, 2009.
- [22] M.J. Zare Bahnemiri and E. Malekian Kale Basti, Ranking of the factors affecting the probability of financial fraud according to the audit report of the financial statements, J. Empir. Res. Account. 6(21) (2016) 1–17.